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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,290	09/30/2003	Hiroyuki Fujikawa	14-019	4736

23400 7590 01/06/2005

POSZ & BETHARDS, PLC  
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RESTON, VA 20190

EXAMINER

SCHWARTZ, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/673,290

Applicant(s)

FUJIKAWA ET AL.

Examiner

Christopher P. Schwartz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

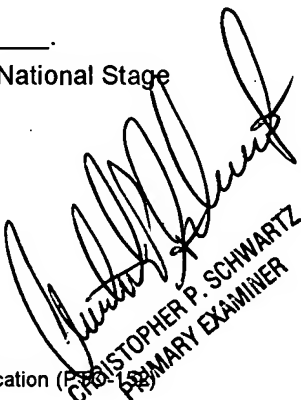
- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-88)
- 6) ☐ Other: \_\_\_\_\_.

  
CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER

### DETAILED ACTION

1. Applicant's amendment filed 10/26/04 has been received and considered.

Claims 4-7 have been canceled. Claims 1-3 and 8 are pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent 2000120738 ('738) in view of Japanese patent 9112606 ('606) and the Journal of Technical Disclosure '790.

Regarding claim 1 Japanese publication '738 shows a disc brake pad having two sections, as discussed in the abstract and applicant's specification at page 2, and as shown in the several embodiments.

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'738 however lacks a discussion of the respective Young's modulus and the friction coefficients of each and the showing of a slit as claimed.

Japanese patent '606 shows a brake pad comprised of substantially two friction materials 3,4 having differing friction coefficients and differing modulus' of elasticities (i.e. young's modulus).

The Journal of Technical Disclosure '790 shows a slit separating two different portions of a brake pad presumably to function as per applicant's, in light of the discussion in applicant's specification at page 3 lines 11-19.

One having ordinary skill in the art at the time of the invention would have found it obvious to have modified the pad of '738 such that the two pad portions shown therein exhibit differing friction coefficients and modulus' of elasticity, as taught by '606, and as claimed by applicants, and to have provided a slit as claimed, as taught by '790, simply dependent upon the wear and braking characteristics desired from the vehicle brakes.

The size requirement of the slit would have been obvious through routine experimentation and testing of the pad, or simply for easier installation of the pads onto the backing plate.

Regarding claims 2,3 to have made one of the friction members protrude outward more than the other in '738, as modified, and to have varied the frictional coefficients of the respective portions of the brake pads by the claimed amount would have been obvious dependent upon the braking and/or wear characteristics desired. Note that '606 suggests protruding one of the brake pads outward more than the others in the several embodiments.

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5. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over JP '738 in view of JP '606 as applied to claim 3 above, and further in view of Itsuaki.

Regarding claim 8 it is well known in the art to make singular parts plural and vice-versa as a matter of routine engineering choice, or to make replacement of certain parts easier.

Itsuaki is relied upon to provide a general teaching of this idea at 5a and 5b. Note the slit shown (but not labeled) between the sections 5a and 5b.

One having ordinary skill in the art at the time of the invention would have found it obvious to have provided a slit between the different pad portions of '738 as modified above and dimensioned as claimed as generally taught by Itsuaki to make their installation during the manufacturing process onto the backing plate easier. The slit could also serve as a cooling means in that air could circulate therethrough.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's mere allegation of "unexpected results" for the dimension of the slit (as applied to claim 1) does not overcome the expected characteristics of easier removal of abrasive particles by simply increasing the size of the slit taught by '790.

With regard to claim 8 applicant's have provided no functional limitation supporting the reason for the specific dimension of the slit.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

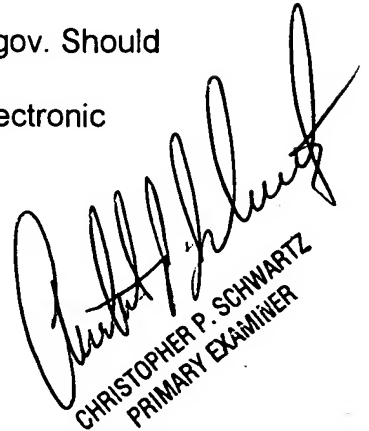
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 703-308-0576. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cps  
12/29/04



CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER